

The Importance of Calcium to Children

Global Nutrition Services, LLC

CALCIUM IS A KEY BUILDING BLOCK FOR STRONG, HEALTHY BONES.

The mineral, calcium, is used to build strong bones during childhood and adolescence. Bone calcium begins to decrease in young adulthood and progressive bone loss can occur as we age, especially in women.

Younger children and babies are at an increased risk of developing rickets if they have a small calcium and vitamin D intake. Vitamin D aids in calcium absorption. Rickets is a bone-softening disease that can cause severe bowing of the legs, poor growth and sometimes muscle pain and weakness.

Calcium is important in muscle contraction, sending signals through the nerves, and releasing hormones. If calcium intake is poor, calcium is taken from the bones to ensure normal cell function.



For optimal bone health, the Institute of Medicine (IOM) recommends:

MILK: WHO SHOULD HAVE IT AND HOW MUCH

Infants should receive breast milk or infant formula as a major source of nutrition during the first year because cow's milk doesn't have the nutrients a growing baby needs.

Kids between the ages of 1 to 2 years should stick to whole milk to help provide the dietary fats they need for normal growth and brain development, but if there is a weight issue then low fat milk is allowed.

According to the 2010 Dietary Guidelines, kids 2 to 3 years should have 2 cups of milk per day and 2 ½ cups for kid's ages 4 to 8 years old. Kids 9 years and older should have 3 cups of milk per day.

0 TO 6 MONTHS OLD – 200MG
6 TO 12 MONTHS OLD – 260MG
1 TO 3 YEARS OLD – 700MG
4 TO 8 YEARS OLD – 1000MG
9 TO 18 YEARS OLD – 1,300MG

Infants 0 to 12 months old should also get 400IU of vitamin D daily, and kids from 1 to 18 years old should get 600IU.

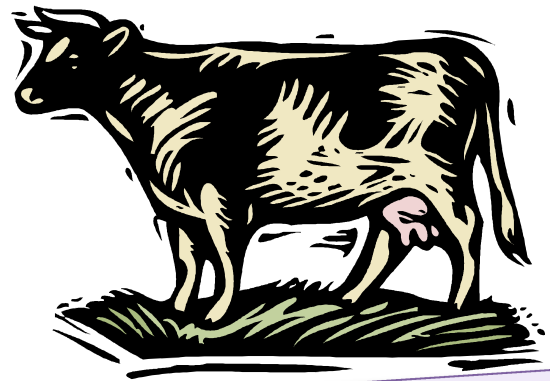
LACTOSE INTOLERANCE AND MILK ALLERGIES

Low lactose and lactose-free products are available for those who are lactose intolerant. There are also lactose drops that can be added to dairy products as well. Sources of dairy that are lower in lactose are hard, aged cheeses (such as cheddar) and yogurts that contain active cultures that are easier to digest and are more likely to cause less lactose-related problems.

If you believe your formula-fed infant has an allergy with cow's milk, they may need to switch to a soy-based or hypoallergenic formula. Older kids with milk allergies can have good alternatives to milk and milk products such as calcium-enriched rice or soy milk, vegan products, and other soy-based or rice-based frozen desserts, sorbets, pudding and ice pops.

VEGETARIAN CHILDREN

It's more of a challenge to obtain the recommended amounts of calcium in a vegetable-only diet, but good sources of calcium can be found in dark green leafy vegetables, broccoli, chickpeas, and calcium fortified products, including orange juice, soy and rice drinks, and cereals.



How to make the meal appealing to your kiddo's taste and adding the necessary amount of calcium at the same time:

- Add milk to desserts such as pudding and custards
- Frozen yogurts and ice cream can be eaten with relish. The frozen yogurt and ice creams can provide sufficient calcium
- Yogurt can be blended into fruit smoothies and can be used as dips
- Milkshakes with chocolate or strawberry syrups can make a healthy calcium fortified snack in the evening or even at breakfast
- Cheese can be grated onto vegetables, pasta and even eggs
- Milk can be added to cereals, oatmeal and porridge for breakfast
- Orange juice, fortified with calcium is now available in markets and can be used in your child's diet
- Tofu can be stir fried with vegetables or added to other dishes to make them rich in calcium and other vitamins
- A lot of food is now fortified with calcium, such as breakfast cereals, oatmeal, English muffins, soy milk, bread and orange juice.

Calculate Your Child's Daily Calcium Intake

Calcium Rich Foods and Supplements	Serving Size	# of Servings	Milligrams of Calcium	Total Milligrams of Calcium
Plain Yogurt	1 cup		X 450	= mg
Calcium Fortified Hot Cocoa	1 packet		X 320	= mg
Fruit yogurt	1 cup		X 315	= mg
Milk (skim, low fat, whole)	1 cup		X 300	= mg
Buttermilk	1 cup		X 300	= mg
Calcium Fortified Juice	1 cup		X 300	= mg
Calcium Fortified Rice/Soy Milk	1 cup		X 300	= mg
Calcium Fortified Cereal	1 ounce		X 300	= mg
Nonfat Dry Milk Powder	5 T		X 300	= mg
Turnip Greens	½ cup		X 250	= mg
American Cheese	2 ounces		X 300	= mg
Cheddar Cheese	1 ½ ounce		X 300	= mg
Carnation Instant Breakfast	1 packet		X 250	= mg
Almonds	½ cup		X 190	= mg
Blackstrap Molasses	1 T		X 175	= mg
Collard Greens	½ cup		X 175	= mg
Calcium Fortified Tofu	½ cup		X 150	= mg
Amaranth, Cooked	½ cup		X 150	= mg
Figs, Dried, Uncooked	½ cup		X 150	= mg
Calcium Fortified Bread	1 slice		X 150	= mg
Pudding, Made with Milk	½ cup		X 150	= mg
Sour Cream, Cultured	½ cup		X 125	= mg
Calcium Fortified Waffles	2		X 120	= mg
Ice Cream/Ice Milk/Frozen Yogurt	½ cup		X 100	= mg

Calcium Rich Foods and Supplements	Serving Size	# of Servings	Milligrams of Calcium	Total Milligrams of Calcium
Soybeans, Boiled	½ cup		X 100	= mg
Spinach, Cooked	½ cup		X 100	= mg
Instant Oatmeal	1 package		X 100	= mg
Broccoli, Cooked	½ cup		X 90	= mg
Sesame Seeds	1 T		X 85	= mg
Cottage Cheese	½ cup		X 75	= mg
Papaya	1 medium		X 70	= mg
White Beans, Cooked	½ cup		X 70	= mg
Red Beans	½ cup		X 40	= mg
Orange	1 medium		X 60	= mg
Whole Wheat Bread	1 slice		X 20	= mg
Bok Choy	½ cup		X 80	= mg
Rhubarb, Cooked	½ cup		X 75	= mg
Calcium Supplement			X	= mg

*Amount of calcium may vary depending on the brand

HOW MUCH CALCIUM DO CHILDREN NEED?

Infant: 0-6m - 200mg

7-12m - 260mg

Children: 1-3 yrs - 700mg

4-8 yrs - 1000mg

Males and Females: 9-18 yrs - 1300mg

My child's calcium intake is _____mg

My child's daily requirement is _____mg